Los Alamos
NATIONAL LABORATORY
memorandum
Environment, Safety, and Health Division
MS K491

To/MS: Distribution
From/MS: Harry Ettinger, ESH-DO/K491
Phone/FAX: 7-4218 / 5-3811
Symbol: ESH-DO:96-239
Date: August 1, 1996

SUBJECT: Request for Proposals for ESH Division Technology Development, Evaluation and Application Studies

Since FY 1995 ESH Division has had a program to fund LANL ES&H related technology development, evaluation and application (TDEA) projects that meet specific requirements. A steering committee has responsibility for reviewing, evaluating, and prioritizing all proposals which are submitted.

Attached is a Request for Proposals. Ten copies of each proposal must be delivered to my office by COB Tuesday, September 3, 1996.

Proposals funded by this program in FY 1996 must be resubmitted to request continued funding during FY 1997. The new proposal must indicate progress during FY 1996 and the purpose and justification for continuance.

During FY 1996 limited funding ($400k) was available. We hope to increase available funding in FY 1997. As you would expect any final decision regarding funding is dependent on the funds available to ES&H Division during FY 1997. It is therefore critical that each proposal show the benefits which will accrue to ESH-Division and the Laboratory.

Increased emphasis will be placed on customer support and/or partnering, dollar savings, and potential for future funding from other sources. Proposals should address these considerations where appropriate.

At this time, the question of capital equipment dollars is unresolved. The Steering Committee will have to assume that Capital funds will not be

available, but we will try (as we did in FY 1996) to obtain some capital funds.

Please distribute the attached information to individuals in your organization who might be interested. Feel free to contact members of the Steering Committee for additional information. Their names are listed in the attachment. To provide some indication of what proposals have been successful, the last attachment lists all proposals funded in FY 1996.

In the past many proposals did not indicate the benefit which will result from the study. This represents a major consideration, especially in light of the tight budget situation. It is to the PI's advantage to address this question as directly and quantitatively as possible.

We will try to put extra copies of this Request for Proposals on the ESH Division Home Page of WWW.

HJE:mv

Attachments: a/s

Distribution:

Dennis Erickson, ESH-DO/K491
John Fox, ESH-DO/K491
Lee McAtee, ESH-DO/K491
Roger Huchton, ESH-1/K487
Jerry Williams, ESH-2/D421
Hillard Howard, Carol Sutcliffe, ESH-3/K489
Dennis Vasilik, Ken Alvar ESH-4/G761
Barbara Hargis, ESH-5/K486
Tom McLaughlin, ESH-6/F691
Rick Brake, ESH-7/K999
Allen Gauler, ESH-9/K478
Bill Flor, ESH-10/K542
Tony Andrade, ESH-12/K483
Meg Cox, ESH-13/J596
Gary Cort, ESH-14/P949
Doug Stavert, ESH-17/J978
Steve Rae, ESH-18/K497
Jim White, ESH-19/K498
Diana Webb, ESH-20/M887
Larry Andrews, ESH-IAO/K491
Robbie Robertson, Loyola Salazar, ESH-OIO/C303
Tom Gunderson, ESH-PO/K491
Joe Graf, ESH-RPO/K483
Doris Garvey, ESH-SWEIS/M889
Robert E. Hermes MST-7/E549
Robert T. Devine, ESH-4/G761
John Rodgers, ESH-4/G761
William Inkret, ESH-12/E546
Micheal Mallett, ESH-4/G761
Gerry Wood, EH-5/486
Phillip Fresquez, ESH-20/M887
Gregg Stone, ESH-17/K490
Scott Walker, ESH-1/H815
Brian Rees, ESH-1/E503
Paul Hoover, ESH-1/E503
Greg Stone, ESH-17/K490

TDEA Committee:
Larry Andrews, ESH-DO/K491
Tom Buhl, ESH-4/G761
Bruce Erdal, EM/TD/J591
Wayne Hansen, EES-15/J495
Larry Hoffman, ESH-10/G732
Marvin Tillery, ESH-5/K494

Request for Proposals

July 1996

LANL-ES&H Division Technology Development, Evaluation & Application (TDEA) Studies

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ES&H Division initiated a program in FY 1995 to fund LANL-ES&H related Technology Development Evaluation and Application (TDEA) projects. Such efforts must be closely related to LANL ES&H requirements and needs. This is an excellent opportunity for LANL technical staff to become involved with the LANL ES&H program by partnering with ES&H Division staff.

For FY 97: The program will focus on (in alphabetical order):

Dosimetry
Instrumentation
Monitoring
Neutron Measurements

This priority list is unchanged from last year based on recent feedback from ESH Division Managers.

Attachment #1 lists all Committee Members, who will be available to answer any questions which may arise.

Attachments #2 lists LANL ES&H Division TDEA Program Priorities for FY 1997 based on input from ESH Groups, and review by the Committee. This is intended as a guide to proposal preparers. If necessary, further clarification can be obtained from any member of the Steering Committee.

Attachment #3 is criteria and a scoring list to be used by the Committee in reviewing proposals. These criteria should help Principal Investigators better focus their effort.

Because of the funding source, it is mandatory that the proposed work be applicable to LANL-ES&H problems (near term and longer term).

Attachment #4 outlines a standard format for proposals. The Principal Investigator should make sure that the proposal addresses the items noted and is clearly applicable to LANL ES&H problems. The overall rating of the Proposal will be based on the criteria noted in Attachment #3 and the technical/scientific quality of the proposed project.

Attachment #5 is copy of the Committee Charter and is provided as additional information regarding the planned efforts of this Committee.

Attachment #6 is a list of TDEA projects funded in FY 1996.

Ten copies of each proposal should be submitted no later than COB Tuesday September 3, 1996 to Harry Ettinger, ESH-DO, MS K491.

The Committee hopes to have its funding recommendations completed by early October so that PI's know their status early in FY 1997. This may be modified by budget uncertainties.

During FY 1997 we expect that ~$500K will be funded through this committee. Any final funding decisions will be controlled by funding levels for ESH-Division. While funding is for a single year, each proposal should indicate funding for the duration of the project, which may be multi-year. We expect this to be a continuing program.

Proposals funded by this program in FY 1996 must be resubmitted to request continued funding. The new proposal must indicate the progress in FY 1996 and the purpose and justification for continuance. In light of tight budgets, it is critical that benefit to ESH-Division and the Laboratory be clearly defined.

TDEA projects can also provide an opportunity to develop techniques and information that may be used as a foundation for studies to be submitted for DOE or reimbursable funding, or collaboration with other internal (LANL) or external (Universities) organizations.

Attachments 1-6 (as noted).

Attachment #1

TDEA Committee Members

Name	Affiliation	Phone	Mail Stop	Fax	E-Mail
Larry Andrews	ESH-IAO	7-6613	K491	5-3811	lla@lanl.gov
Tom Buhl	ESH-4	5-8176	G761	5-6071	buhl_thomas_e@lanl.gov
Harry Ettinger	ESH-DO	5-2467	K491	5-3811	hettinger@lanl.gov
Bruce Erdal	EM/TD	7-5338	J591	5-8118	erdal@lanl.gov
Wayne Hansen	EES-15	7-3331	J495	5-3866	hansen_wayne_r@lanl.gov
Larry Hoffman	ESH-10	5-8890	K542	5-4477	hoff@lanl.gov
Marvin Tillery	ESH-5	5-4427	K494	7-1945	tillerym@lanl.gov

Attachment #2

Priority Technical Areas of Interest for FY 1997

The priority technical areas were determined from information submitted by ESH Groups for the FY95 funding year and modified for FY 1996 and FY 1997. The areas identified are broad categories that encompass the subjects and projects to be submitted. These are:

1. Dosimetry
2. Instrumentation
3. Monitoring
4. Neutron measurements

Monitoring, for example, may include vital sign monitoring in stressful work situations, methods or techniques for monitoring individuals or equipment for contamination and environmental monitoring. The instrumentation area may include development or improvement of instruments and instrument systems such as personnel monitoring instruments, workplace monitoring instruments or instrumentation designed for environmental measurements. Dosimetry is also a very broad category. It may include radiation biology, new internal dosimetry methods and procedures, and external dosimetry methods. Dosimetry also includes epidemiological studies of LANL workers. Neutron measurements should be associated with dosimetry measurements at some point.

Attachment #3

Relative Prioritization and Weighting Factors
Criteria for Priority Listing

July 1996
(Supercedes July 1995 Version)

A. High

1. Applicability to specific LANL-ES&H problems (100 points maximum)

Priority of need and potential to satisfy need - Examples would be ideas that may significantly reduce risk to workers and/or provide significant long term cost savings. Cost savings must be specified using the latest available information.

Operational aspects are given more emphasis than solely compliance aspects Development of a system to reduce exposure to carcinogens would be given priority over a system designed to simply demonstrate compliance.

2. Cost and/or resource saving for ESH operations/applications, and/or achieving line organization program goals (100 points maximum)

Improved efficiency of ES&H activities - Specify estimates of cost and/or resource savings. As an example, automating a system that normally would require the extensive use of manpower, but is a repetitive set of tasks that may only need to be programmed once. Specify savings for the long term future as well as the short term. Return on investment. The effort may cost $50K up front, but can save 5 times that value every year in personnel costs (show calculations).

Program goals: Meets line organization goals faster, cheaper, better, by modifying ESH related activities.

3. Probability of success (100 points maximum)

Both immediate program goals and application to ES&H needs and operations - Projects will receive higher scores for practicality and ease of implementation for solving ES&H problems. The approach should be described.

B. Intermediate

1. Relative magnitude of costs (75 points maximum)

Considering available TDEA funds it is difficult to fund a project for much more than $100K in any single year. The Committee will consider both the funding requested from the TDEA budget, and the funding provided from other sources, using the matrix noted below. This should encourage teaming (internal and/or external) and seeking other funding sources. This is especially important if it shows interest/support from line organizations and/or their funding sources.

Proposal Cost ESH/TDEA Budget		*Funds from another Source*	
$	points	Relative funding	points
<25K	25	>Cost to ESH	50
<50K	20	=Cost to ESH	40
<75K	15	<Cost to ESH	30
<100K	10	No Other	-0-
>100K	-0-		

2. Time to implementation (50 point maximum)

Preference will be given to projects with shorter completion times. Longer projects will be considered if they can be justified in terms of benefits. The matrix noted below quantitatively indicates how the committee will evaluate

proposals relative to these considerations which considers both project time and implementation time.

Length of Project	*Points*	*Time for Implemented*	*Points*
<6mo	25	<6 mo	25
<1yr	20	<1 yr	20
<2yr	10	<2 yr	10
>2yr	5	>2 yr	5

3. Addresses Performance Measure (50 point maximum)

Preference is given to studies which address performance measures such as UC Contract Appendix F Performance Measures for the Environment, Safety and Health section of the Appendix. Other performance measures may be related to regulations or DOE Orders that influence ES&H programs.

UC Appendix F Performance Measure	30 points
Regulatory Performance	20 points

C. Lower (25 point maximum)

Miscellaneous considerations including (but not limited to the following)

- Innovative approaches to solve ES&H problems
- ESH Division is the only likely source of support
- Maturity of technology development
- etc.

The total number of points in the scoring process is:

A = 300 pts maximum
B = 175 pts maximum
C = 25 pts maximum
Grand Total *500 pts*

Attachment #4

Format for Proposals

July 1996

(Supercedes July 1995 Version)

Only proposals that follow the format noted will be evaluated.

Title Page (One Page)

Title
Name of Principal Investigator(s), co-investigators, and group(s)
Collaborating Organizations (if any)
Requested Budget (by year)
Date of Submission
Indicate if new or continuing proposal

Written Portion of Proposal (five Pages Maximum) Submit proposals with numbering that corresponds with the below criteria.

1. Problem Identification. A clear succinct description of problem to be addressed.

2. Benefit

   A description of the benefit to the LANL ES&H Programs and Laboratory Programmatic objectives as a result of the completion of the proposed project. This must include either benefits related to the environment, worker/public health and safety, or improved operation. An estimate in $ (dollars) saved or resource requirements reduced through direct cost savings and/or improved efficiencies and/or improved health and safety is important. In some instances the benefit may be in terms of improved ESH provided; new regulations satisfied; or support for more efficiently meeting technical objectives of

programs. Some indication of near term and/or long term benefits to LANL must be provided.

3. Background and Objective(s)

A discussion of the relevant background of the proposed project which would be sufficient for the reviewers understanding of the proposed work. The objective(s) of the proposed project should be clearly stated at the end of this section.

4. Work plan

The workplan should include a discussion of the approach, budget, schedule, and applicability to the regulatory agencies. For continuing projects, progress-to-date, referenced to original expectations, is required.

5. Deliverables(s)

A concise discussion of what the proposed project will deliver, what is necessary to **implement** the deliverable and when it will be **ready for implementation**. This discussion is typically closely tied to the discussion of benefit (#2).

6. Schedule (One Page maximum)

The schedule should be in a Gantt Chart type of format showing activities, duration's and milestones (including deliverables).

7. Budget (One Page maximum)

The budget would reflect the major elements of the project, which will correspond to the activities on the schedule. Separately indicate Operating, Capital, FTE's. At this time is not clear that any capital equipment funds will be available, so the **TDEA program cannot fund projects where access to capital funding is an absolute requirement.** Indicate any other funding sources (i.e. matching funds by a line organization).

8. ES&H Evaluation

The proposal should briefly indicate that potential ES&H concerns associated with performing the study have been evaluated, and note what action (if any) is required to assume that the proposed study will be conducted in a manner that protects employees, contractors, the public, and the environment from the harmful effects of any anticipated hazards.

This evaluation must show that appropriate work planning and hazard analysis is performed before the work begins, and that established safety procedures will be followed meticulously. This must show that the Laboratory 5-step approach will be followed.

- plan the work
- analyze the hazards
- develop and implement hazard controls
- perform the work safely
- identify improvements to enhance safety

9. Monthly reports must be submitted for review to the Committee, who will discuss with the PI the level of detail for such reports, and will identify any problems they see regarding progress or schedules.